

blueprint series Loudspeakers

# MODEL SERIES 2

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#### **CONGRATULATIONS**

Thank you for choosing a Blueprint Series® Loudspeaker from Niles. With proper installation and operation, you'll enjoy years of trouble-free use.

# **SPECIFICATIONS**

#### **DESIGN PRINCIPLE**

Infinite baffle. Specifically designed for in-ceiling applications. Extended bass response, ultra-wide dispersion

#### **WOOFER**

5-1/4" polypropylene with a butyl rubber surround and treated fabric dust cap

TWEETER 3/4" dome

FREQUENCY RESPONSE 63 Hz to 20 kHz +/- 4 dB

#### **SENSITIVITY**

89 decibels for 2.83 volts of pink noise, measured at 1 meter on axis

#### **IMPEDANCE**

8 ohm nominal; 7 ohm minimum

**OVERALL DIMENSIONS** (With frame)

Model 75: 7" square x 2 1/2" deep Model 76: 7 3/4" dia. x 3 1/4" deep

Model 77: 73/4" dia. x 3 1/4" deep

MOUNTING DEPTH

2 3/4" (assumes 1/2" dry wall)

#### WALL CUT-OUT FOR RETROFIT

Model 75: 5 3/4" square

Model 76 & 77: 6 1/2" diameter

**BEZEL FINISH** 

Pearl white ABS with non-glare finish

#### **GRILL COLOR AND MATERIAL**

Model 75 & 76

Pearl white, perforated aluminum

Model 77

Satin black, perforated plastic

WEIGHT 3 1/2 lbs. per pair

# **FEATURES & BENEFITS**

Like our other Blueprint Series Loudspeakers, these ceiling mount models offer Niles durability and installation ease and are designed for unobtrusive installations.

Model 75 measures a compact 7 by 7 inches square; Model 76 is a similarly compact round design measuring 7-3/4 inches in diameter. Both feature a weather-resistant 5-1/4 inch polypropylene coaxial driver system with a butyl rubber surround and powder coated aluminum grills, making them suitable for bathroom and outdoor patio applications. Both models employ a bracketless mounting system: simply cut a hole in the mounting surface and tighten the four clamps

via front-baffle screws. And like other Blueprint Series speakers, the flush, tightmesh grills can be painted or covered to blend with the surrounding decor.

Model 77 is similar to Model 76 but is designed to masquerade as a recessed lighting fixture. Its recessed black grill is attached to a 6-1/4 inch diameter black collar which fits neatly into the bezel. Model 77 blends in quietly with neighboring light fixtures while providing a "floodlight" of sound.

#### PACKAGE CONTENTS

- 1 Pair of Speakers
- 1 Pair of Hole Templates

#### PLACEMENT CONSIDERATIONS

The Models 75, 76 and 77 are designed to work well in any standard ceiling or wall. For the Model 75, the mounting surface must be between 3/8 and 5/8 inch thick. All models will perform well in any air volume greater than .5 cubic feet.

When wall mounting the speakers, the best stereo effect will be achieved if both the speakers are at equal distance from the listener and closer together than the listener is from the speakers. Avoid installing the speakers near corners to prevent a "boomy" or diffracted sound.

# WIRING CONSIDERATIONS

These speakers, like all Blueprint Series Loudspeakers, are designed to be minimally affected by long lengths of speaker wire. The Models 75, 76 and 77 will accommodate speaker wire between 12 and 22 gauge.

CONTINUED OTHER SIDE



# **TOOLS REQUIRED**

- Keyhole saw
- #2 Philips screwdriver or screwdriver bit
- Pencil

# **INSTALLATION PROCEDURE**

1. Locate the hole template and remove the inside portion of it. Save this part—it may be used as a paint mask. Use the inside of the template to trace the outlines at the desired location on the ceiling or wall. With a keyhole saw, cut along the penciled lines.

# BE CAREFUL NOT TO CUT THROUGH ANY EXISTING WIRING.

- **2.** Attach the speaker wires to the speaker. Be sure that proper phasing is observed.
- 3. On all models, there are four clamps which hold each speaker in place. The clamps are tightened via four front-baffle screws. To install the speaker, first rotate the clamps inward. Insert the speaker into the cutout and tighten the clamps by turning the screws clockwise. DO NOT

OVER TIGHTEN THESE SCREWS. Overtightening the clamps may make the grill difficult to install. Refer to Figure 1.

NOTE: The screws will be easier to turn if you "prime" them first. Before installing each speaker, turn the screws in and then turn them back out to their original positions.

- 4. Install the grill into the speaker. The grills for Models 75 and 76 fit tightly. This is to prevent each grill from becoming loose over time. Some effort and care is required when installing them. The Model 77 grill snaps into place. Insert the grill into the speaker and press along the outside edge of the plastic collar.
- **5.** Repeat this procedure for the next speaker.

# REMOVING THE GRILL

To remove the grill from the Model 75 and 76, obtain a small paper clip (size #1, common) and bend the last quarter inch of it into an "L" shape. Holding the paper clip with a pair of pliers, insert the end with the "L" into a hole near the edge of the grill. Stay near one of the corners on

Model 75. Remove the grill by pulling the paper clip towards you.

For the Model 77, press your fingers against the inside of the black collar. While pressing against the collar, pull it towards you.

# PAINTING THE SPEAKERS AND GRILLS

All models may be painted. The plastic will readily accept most any kind of paint.

loop. Affix the tape to the tweeter and place the mask onto the speaker.

The speakers must be masked prior to painting them. The inside portion of the hole template can be used as a paint mask. Remove the outside portion of the template by gently pulling along the perforation. Affix the mask to the front of the speaker using a piece of tape. Fold the tape onto itself to form a double-sided

The grills should be painted before they are installed. For all models, the best results will be obtained by using a spray gun or airless sprayer, thinning the paint (prevents clogging of grill holes) and by applying several light coats instead of one heavy one.



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